The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously presented) An optical waveguide lens for collimating or focusing a light beam, the light beam having a mode field diameter measured at a beam waist when the light is transmitted through the optical waveguide lens into free space, the optical waveguide lens comprising:

an optical waveguide having an end through which the light propagates and a diameter; and

a lens member integrally attached to and extending from the end of the optical waveguide, the lens member having a throat portion and a generally spherical lens portion, the throat portion having a cross-sectional dimension substantially greater than the diameter of the optical waveguide.

2. (Original) The optical waveguide lens of claim 1 wherein the optical waveguide has a core and a cladding, the core being fabricated from a doped glass having a softening point, and wherein the lens member is fabricated from a generally homogenous glass having a softening point less than the softening point of the core of the optical waveguide.

3. (Original) The optical waveguide lens of claim 1 wherein the lens member is fabricated from a generally homogenous glass including a borosilicate glass.

4. (Original) The optical waveguide lens of claim 1 wherein the lens member is fabricated from a 4 weight percent borosilicate glass.

5. (Original) The optical waveguide lens of claim 1 wherein the optical waveguide has a diameter on the order of 125 microns and the cross-sectional dimension of the throat portion is greater than 135 microns.

6. (Original) The optical waveguide lens of claim 1 wherein the optical waveguide has a diameter on the order of 125 microns and the cross-sectional dimension of the throat portion is greater than 200 microns.

7. (Original) The optical waveguide lens of claim 1 wherein the cross-sectional dimension of the throat portion of the lens member is about 1.5 or more times diameter of the optical waveguide.

8. (Original) The optical waveguide lens of claim 1 wherein the mode field diameter of the light beam measured at the beam waist is greater than 30 microns.

9. (Original) The optical waveguide lens of claim 1 wherein the mode field diameter of the light beam measured at the beam waist is greater than 120 microns.

10. (Original) The optical waveguide lens of claim 1 wherein the mode field diameter of the light beam measured at the beam waist is greater than 200 microns.

11. (Original) The optical waveguide lens of claim 1 wherein the mode field diameter of the light beam measured at the beam waist is greater than 500 microns.

12. (Original) The optical waveguide lens of claim 1 wherein the mode field diameter of the light beam measured at the beam waist is between 200 and 800 microns.

13. (Original) The optical waveguide lens of claim 1 wherein the optical waveguide is selected from a group consisting of a single-mode optical fiber, a multi-mode optical fiber, a polarization-maintaining optical fiber, a dual-core optical fiber, a separable-core

optical fiber, a circular cross-section optical fiber, and a non-circular cross-section optical fiber.

14. Canceled.

15. Canceled.

16. Canceled.

17. Canceled.

18. (Previously presented) An optical waveguide lens for collimating or focusing a light beam, the optical waveguide lens comprising:

an optical waveguide having a core, a cladding, and an end through which the light propagates, the core being fabricated from a glass having a softening point; and

a lens member integrally attached to and extending from the end of the optical waveguide, the lens member having a generally spherical lens portion, the lens member being fabricated from a glass having a softening point that is less than the softening point of the core of the optical waveguide.

19. (Original) The optical waveguide lens of claim 18 wherein the optical waveguide has an axis, and the lens member has a generally uniform refractive index which does not vary in a radial direction measured relative to the axis of the optical waveguide.

20. (Original) The optical waveguide lens of claim 18 wherein the lens member is fabricated from a generally homogenous borosilicate glass.

21. (Original) The optical waveguide lens of claim 20 wherein the lens member is fabricated from a 4 weight percent borosilicate glass.

22. (Previously presented) A method for fabricating an optical waveguide lens for collimating or focusing a light beam, the method comprising the steps of:

providing an optical waveguide having an end through which the light beam is transmitted, a diameter, and an axis;

providing a lens blank, the lens blank having a face defining a cross-sectional dimension substantially greater than the diameter of the optical waveguide, the lens blank having a softening point;

integrally attaching the lens blank to the optical waveguide such that the end of the optical fiber contacts and is fused to the face of the lens blank;

heating a portion of the lens blank above the softening point;

applying tension to the lens blank such that the lens blank is drawn and separated to form a tapered distal end connected to and extending from the optical waveguide; and

heating the tapered distal end of the lens blank above the softening point such that a generally spherical lens portion having a diameter is formed in general alignment with the axis of the optical waveguide and through which the light beam is transmitted, and such that a throat portion of the lens blank disposed between the optical waveguide and the generally spherical lens portion has a cross-sectional dimension substantially greater than the diameter of the optical waveguide and substantially less than the diameter of the generally spherical lens portion.

23. (Original) The method of claim 22 wherein the lens blank is a generally homogenous borosilicate glass.

24. (Original) The method of claim 23 wherein the lens blank is a 4 weight percent borosilicate glass.

25. (Previously presented) A method for fabricating an optical component wherein a light beam propagates through free space relative to an optical device, the method comprising the steps of:

providing an optical waveguide lens including an integrally attached optical waveguide having a diameter and an axis, a throat portion connected to and extending from the optical waveguide, the throat portion having a cross-sectional dimension substantially greater than the diameter of the optical waveguide, and a generally spherical lens portion connected to and extending from the throat portion, the generally spherical lens portion having a diameter substantially greater than the cross-sectional dimension of the throat portion;

positioning the optical waveguide lens relative to the optical device such that the light beam propagates either from the optical waveguide lens to the optical device or from the optical device to the optical waveguide lens or both; and

securing the optical waveguide lens relative to the optical device.

26. (Original) The method of claim 25 wherein the optical waveguide has a core fabricated from a glass material having a softening point, the optical waveguide lens being fabricated from a glass material having a softening point which is less than the softening point of the core.

27. (Original) The method of claim 25 wherein the optical waveguide lens is fabricated from a borosilicate glass material.

28. (Original) The method of claim 27 wherein the optical waveguide lens is fabricated from a 4 weight percent borosilicate glass.

29. (Original) The method of claim 25 wherein the optical waveguide lens collimates the light beam propagating from the optical waveguide into the free space

30. (Original) The method of claim 25 wherein the optical waveguide lens focuses the light beam propagating from the free space into the optical waveguide

31. (Original) The method of claim 25 wherein the optical device is a passive optical component.

32. (Original) The method of claim 25 wherein the optical device is an active optical component.

33. (Original) The method of claim 25 wherein the optical device is selected from a group consisting of a multiplexing component or a demultiplexing component.

34. (Original) The method of claim 25 wherein the optical device is selected from a group consisting of a switch component, a router component, or an optical add/drop component.

35. (Previously presented) A method for fabricating an optical waveguide lens assembly comprising the steps of:

providing an optical waveguide having a diameter and a distal end;

providing a ferrule defining a bore extending therethrough, the bore having a diameter equal to or greater than the diameter of the optical waveguide, the ferrule having an end surface;

inserting the optical waveguide through the bore such that a segment of the distal end of the optical waveguide is exposed;

integrally forming a lens member on the distal end of the optical waveguide, the lens member including a generally spherical portion;

retracting the optical waveguide through the bore such that a portion of the lens member contacts the end surface of the ferrule; and

securing the optical waveguide in position relative to the ferrule.

36. (Previously presented) A method for fabricating a plurality of generally spherical lenses each having a mounting post extending therefrom, the method comprising the steps of:

providing an elongated stock of a glass material from which the plurality of generally spherical lenses are to be formed, the glass material having a softening point, the elongated stock having a distal end and a cross-sectional dimension;

integrally forming a generally spherical lens on the distal end of the elongated stock by heating the glass material above its softening point such that a portion of the elongated stock forms the spherical lens due in part to a surface tension of the glass material, the generally spherical lens having a diameter substantially greater than the cross-sectional dimension of the elongated stock;

separating the generally spherical lens and a segment of the elongated stock connected to the generally spherical lens from a remaining portion of the elongated stock, such that the segment of the elongated stock connected to the generally spherical lens forms the mounting post for the generally spherical lens; and

repeating the forming step and the separating step to fabricate the plurality of generally spherical lenses each having the mounting post extending therefrom.

37. Cancelled

38. Cancelled

39. Cancelled

40. Cancelled

41. (Previously presented) An optical waveguide lens for collimating or focusing a light beam comprising:

an optical waveguide having an end through which the light propagates and a diameter; and

a lens member integrally attached to and extending from the end of the optical waveguide, the lens member having a generally spherical lens portion, the lens member being fabricated from a borosilicate glass.

42. Cancelled

43. Cancelled.

44. Cancelled

45. Cancelled.

46. (Previously presented) An optical waveguide lens assembly for collimating or focusing a light beam, the optical waveguide lens assembly comprising:

an optical waveguide having a core, a cladding, and an end; and

a lens member connected integrally to the end of the optical waveguide, the lens member having a throat portion and a lens portion, the optical waveguide being connected to the throat portion, the throat portion having a cross-sectional dimension that differs substantially from the diameter of the optical waveguide at or proximate to a point where the throat portion is connected to the end of the optical waveguide.

47. (Previously presented) The optical waveguide lens assembly of claim 46 wherein the core of the optical waveguide is a glass having a softening point, and wherein the throat portion of the lens member is a glass having a softening point that is less than the softening point of the core of the optical waveguide.

48. (Previously presented) The optical waveguide lens assembly of claim 47 wherein the lens member is fabricated from a borosilicate glass.

49. (Previously presented) The optical waveguide lens assembly of claim 48 wherein the borosilicate glass is four weight percent (4 wt %) borosilicate glass.

50. (Previously presented) The optical waveguide lens assembly of claim 46 wherein the cross-sectional dimension of the throat portion differs from the diameter of the optical waveguide by eight percent (8%) or more.

51. (Previously presented) The optical waveguide lens assembly of claim 46 wherein the cross-sectional dimension of the throat portion differs from the diameter of the optical waveguide by sixty percent (60%) or more.

52. (Previously presented) The optical waveguide lens assembly of claim 46 wherein the cross-sectional dimension of the throat portion differs from the diameter of the optical waveguide by ten microns or more.

53. (Previously presented) The optical waveguide lens assembly of claim 46 wherein the cross-sectional dimension of the throat portion differs from the diameter of the optical waveguide by seventy-five microns or more.